

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

- 1-1- The square root of  $a^2 - 2a + 1$  is ----:
  - (a)  $\pm(a + 1)$
  - (b)  $\pm(a - 1) \checkmark$
  - (c)  $(a - 1)$
  - (d)  $(a + 1)$
- 2- A diagonal of a parallelogram divides it into -- congruent triangles:
  - (a) 2  $\checkmark$
  - (b) 3
  - (c) 4
  - (d) 6
- 3- Two parallel lines intersect at --- point / points:
  - (a) Three
  - (b) Two
  - (c) One
  - (d) No  $\checkmark$
- 4- The diagonals of parallelogram --- each other:
  - (a) Bisect  $\checkmark$
  - (b) Trisect
  - (c) Bisect at right angle
  - (d) Trisect at right angle
- 5- Order of transpose of matrix  $\begin{bmatrix} 2 & 1 \\ 0 & 1 \\ 3 & 2 \end{bmatrix}$  is:
  - (a) 3 – by – 2  $\checkmark$
  - (b) 2 – by – 3
  - (c) 1 – by – 3
  - (d) 3 – by – 1
- 6-  $x = 0$  is a solution of the inequality ----:
  - (a)  $x > 0$
  - (b)  $3x + 5 < 0$
  - (c)  $x + 2 < 0$
  - (d)  $x - 2 < 0 \checkmark$



- 7- Any point on the bisector of an angle is --- from its arms:
- (a) Un-equidistance
  - (b) Equidistance ✓
  - (c) Large distance
  - (d) Small distance
- 8-  $(3 + \sqrt{2})(3 - \sqrt{2})$  is equal to:
- (a) 7 ✓
  - (b) -7
  - (c) -1
  - (d) 1
- 9- Unit of ratio is ----:
- (a) Degree
  - (b) None ✓
  - (c) cm
  - (d)  $\pi$
- 10- Point  $(-3, -3)$  lies in quadrant:
- (a) I
  - (b) II
  - (c) III ✓
  - (d) IV
- 11- The logarithm of unity to any base is ---- :
- (a) 1
  - (b) 10
  - (c) e
  - (d) 0 ✓
- 12- A ray has end points:
- (a) 1 ✓
  - (b) 2
  - (c) 3
  - (d) 4
- 13- Distance between points  $(0, 0)$  and  $(1, 1)$  is ----:
- (a) 0
  - (b) 1
  - (c) 2
  - (d)  $\sqrt{2}$  ✓
- 14- The conjugate of  $5 + 4i$  is ---- :
- (a)  $-5 + 4i$
  - (b)  $-5 - 4i$
  - (c)  $5 - 4i$  ✓
  - (d)  $5 + 4i$
- 15- In a parallelogram opposite angles are ----:
- (a) Perpendicular
  - (b) Equal ✓
  - (c) Unequal
  - (d) Acute